

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 15.02.2019

Version: 1

Revision: 15.02.2019

SECTION 1: Identification of the substance/mixture and of the company/undertaking

· **1.1 Product identifier**

· Trade name: **SDW 3 HARD WATER**

· Article number: 96120001

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**

· **Sector of Use**

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

· **Product category** PC35 Washing and cleaning products (including solvent based products)

· **Application of the substance / the mixture** Dishwasher formulation

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

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· **Further information obtainable from:**

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· **1.4 Emergency telephone number:**

Customer Service
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B: Tel: +32 2 347 0117 Fax: +32 2 347 1395
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UK: Tel: +44 151 422 1000 Fax: +44 151 422 1011
EU: Tel. 112

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**

Acute Tox. 4 H302 Harmful if swallowed.

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the CLP regulation.

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· **Hazard pictograms**

GHS05

GHS07

GHS08

· **Signal word** Danger· **Hazard-determining components of labelling:**

tetrasodium ethylenediaminetetraacetate

Tetrasodium orthosilicate

disodium metasilicate pentahydrate

sodium hydroxide

· **Hazard statements**

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H373 May cause damage to organs through prolonged or repeated exposure.

· **Precautionary statements**

P280 Wear eye protection / face protection.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **2.3 Other hazards** The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds.· **Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**· **Description:** Mixture of substances listed below with nonhazardous additions.· **Dangerous components:**

CAS: 64-02-8 EINECS: 200-573-9 Reg.nr.: 01-2119486762-27-xxxx	tetrasodium ethylenediaminetetraacetate	25-50%
	☠ STOT RE 2, H373	
	☠ Eye Dam. 1, H318 ☠ Acute Tox. 4, H302; Acute Tox. 4, H332	
CAS: 13472-30-5 EINECS: 236-741-3	Tetrasodium orthosilicate	10-25%
	☠ Skin Corr. 1A, H314	
	☠ STOT SE 3, H335	
CAS: 10213-79-3 EINECS: 229-912-9 Reg.nr.: 01-2119449811-37-xxxx	disodium metasilicate pentahydrate	5-10%
	☠ Met. Corr. 1, H290; Skin Corr. 1B, H314	
	☠ Acute Tox. 4, H302; STOT SE 3, H335	
CAS: 1310-73-2 EINECS: 215-185-5 Reg.nr.: 01-2119457892-27-xxxx	sodium hydroxide	1-2.5%
	☠ Met. Corr. 1, H290; Skin Corr. 1A, H314	
	☠ Acute Tox. 4, H302; Acute Tox. 4, H312	
CAS: 68154-99-4 EC number: 627-098-3	Alcohols, C8-10, ethers with polyethylene-polypropylene glycol monobenzyl ether	1-2.5%
	☠ Eye Dam. 1, H318	
	☠ Acute Tox. 4, H312; Skin Irrit. 2, H315	

· **Ingredients according to Detergents Regulation 648/2004/EC**

For the wording of the listed hazard phrases refer to section 16.

EDTA and salts thereof	≥30%
Nonionic surfactants, Phosphonates, Polycarboxylates	<5%

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SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation: In case of unconsciousness place patient stably in side position for transportation.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.

Immediately rinse with water.

Seek medical treatment.

After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing:

Do not induce vomiting; call for medical help immediately.

Call for a doctor immediately.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

5.2 Special hazards arising from the substance or mixture No further relevant information available.

5.3 Advice for firefighters

Protective equipment: No special measures required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Use neutralising agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Thorough dedusting.

Store in cool, dry place in tightly closed receptacles.

Use only in well ventilated areas.

Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Do not store together with acids.

Further information about storage conditions: Keep receptacle tightly sealed.

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.

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· **8.1 Control parameters**· **Ingredients with limit values that require monitoring at the workplace:****1310-73-2 sodium hydroxide (1-2.5%)**WEL (Great Britain) Short-term value: 2 mg/m³· **DNELs****64-02-8 tetrasodium ethylenediaminetetraacetate**

Oral DNEL Long term-systemic 28 mg/kg human/day (consumer)

Inhalative DNEL Acute-systemic mg/m³ 1.7 mg/m³ (consumer)2.8 mg/m³ (worker)**1310-73-2 sodium hydroxide**Inhalative DNEL Long term local mg/m³ 1 mg/m³ (consumer)1 mg/m³ (worker)· **PNECs****64-02-8 tetrasodium ethylenediaminetetraacetate**

PNEC Freshwater mg/L 2.8 mg/L

PNEC Marinewater mg/L 0.28 mg/L

PNEC Intermittent release 1.6 (mg/L)

PNEC Soil 0.95 mg/Kg

PNEC Sewage treatment Plant mg/L 57 mg/L

· **Additional information:** The lists valid during the making were used as basis.· **8.2 Exposure controls**· **Personal protective equipment:**· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· **Protection of hands:**

Protective gloves

Rubber gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Rubber gloves

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

· **Not suitable are gloves made of the following materials:** Strong material gloves· **Eye protection:**

Tightly sealed goggles

· **Body protection:** Alkaline resistant protective clothing

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SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Solid

Colour: White

· Odour: Characteristic

· Odour threshold: Not determined.

· pH-value: Not applicable.

· Change in condition

Melting point/freezing point: Undetermined.

Initial boiling point and boiling range: Undetermined.

· Flash point: Not applicable.

· Flammability (solid, gas): Not determined.
Not applicable.

· Decomposition temperature: Not determined.

· Auto-ignition temperature: Product is not selfigniting.

· Explosive properties: Product does not present an explosion hazard.
Not determined.

· Explosion limits:

Lower: Not determined.

Upper: Not determined.

· Vapour pressure: Not applicable.

· Density at 20 °C: 1.5 g/cm³

· Relative density: Not determined.

· Vapour density: Not applicable.

· Evaporation rate: Not applicable.

· Solubility in / Miscibility with water: Insoluble.

· Partition coefficient: n-octanol/water: Not determined.

· Viscosity:

Dynamic: Not applicable.

Kinematic: Not applicable.

· Solvent content:

Swiss VOC: 0.00 %

Solids content: 44.0 %

· 9.2 Other information: No further relevant information available.

SECTION 10: Stability and reactivity

· 10.1 Reactivity: No further relevant information available.

· 10.2 Chemical stability

· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

· 10.3 Possibility of hazardous reactions: No dangerous reactions known.

· 10.4 Conditions to avoid: No further relevant information available.

· 10.5 Incompatible materials: No further relevant information available.

· 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

· 11.1 Information on toxicological effects

· Acute toxicity

Harmful if swallowed.

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· LD/LC50 values relevant for classification:**64-02-8 tetrasodium ethylenediaminetetraacetate**

Oral	LD50	1,560 mg/kg
Inhalative	LC50 / 4 h	>1,000 mg/ltr 2 mg/ltr (Rat)
	LC50 / 96 h	>1,000 mg/ltr (Lepomis Macrochirus (Bluegill Sunfish)) 33-189 mg/ltr (fish)
	EC 50 / 48 h	140 mg/ltr (Daphnia magna (water flea))
	EC 50 / 72 H	>300 (Desmodesmus subspicatus) (mg/L)

10213-79-3 disodium metasilicate pentahydrate

Oral	LD50	>1,000 mg/kg (Rat)
	LC50 / 96 h	>200 mg/ltr (Daphnia magna (water flea))

1310-73-2 sodium hydroxide

Oral	LD50	2,000 mg/kg (Rat)
Dermal	LD50	1,350 mg/kg (Rabbit)
	LC50 / 96 h	125 mg/ltr (Gambusia affinis)

68154-99-4 Alcohols, C8-10, ethers with polyethylene-polypropylene glycol monobenzyl ether

Oral	LD50	2,414 mg/kg (Rat)
Dermal	LD50	2,000 mg/kg (Rabbit)
Inhalative	LC50/ 8 h	>7.1 mg/m3 (-)

· Primary irritant effect:**· Skin corrosion/irritation**

Causes severe skin burns and eye damage.

· Serious eye damage/irritation

Causes serious eye damage.

· Respiratory or skin sensitisation Based on available data, the classification criteria are not met.**· CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)****· Germ cell mutagenicity** Based on available data, the classification criteria are not met.**· Carcinogenicity** Based on available data, the classification criteria are not met.**· Reproductive toxicity** Based on available data, the classification criteria are not met.**· STOT-single exposure** Based on available data, the classification criteria are not met.**· STOT-repeated exposure**

May cause damage to organs through prolonged or repeated exposure.

· Aspiration hazard Based on available data, the classification criteria are not met.**SECTION 12: Ecological information****· 12.1 Toxicity****· Aquatic toxicity:** No further relevant information available.**· 12.2 Persistence and degradability** No further relevant information available.**· Other information:** The product is biodegradable.**· 12.3 Bioaccumulative potential** No further relevant information available.**· 12.4 Mobility in soil** No further relevant information available.**· Additional ecological information:****· General notes:**

Must not reach sewage water or drainage ditch undiluted or unneutralised.

In accordance with the requirements of the RVO in the Act on Detergents and Cleansing Agents, tensides are biodegradable up to at least 90 %.

· 12.5 Results of PBT and vPvB assessment**· PBT:** Not applicable.**· vPvB:** Not applicable.**· 12.6 Other adverse effects** No further relevant information available.**SECTION 13: Disposal considerations****· 13.1 Waste treatment methods****· Recommendation** Disposal must be made according to official regulations

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- **Uncleaned packaging:**
- **Recommendation:** Disposal in accordance with administrative provisions

SECTION 14: Transport information

· 14.1 UN-Number · ADR, IMDG, IATA	UN3262
· 14.2 UN proper shipping name · ADR · IMDG, IATA	3262 CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE, DISODIUM TRIOXOSILICATE) CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE, DISODIUM TRIOXOSILICATE)
· 14.3 Transport hazard class(es) · ADR	
	
· Class · Label	8 (C6) Corrosive substances. 8
· IMDG, IATA	
	
· Class · Label	8 Corrosive substances. 8
· 14.4 Packing group · ADR, IMDG, IATA	III
· 14.5 Environmental hazards:	Not applicable.
· 14.6 Special precautions for user · Danger code (Kemler): · EMS Number: · Segregation groups · Stowage Category · Segregation Code	Warning: Corrosive substances. 8 8 Alkalis B SG35 Stow "separated from" acids.
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR · Limited quantities (LQ) · Excepted quantities (EQ) · Transport category · Tunnel restriction code	5 Code: E 3 E
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	5 Code: E
· UN "Model Regulation":	UN 3262 CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE, DISODIUM TRIOXOSILICATE), 8, III

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Reg. (EC) n. 1272/2008 - CLP;
Reg. (EC) n. 1907/2006 – Reach;
Reg. (EC) n. 2015/830 annex II of REACH;

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Reg. (EC) n. 648/04 (Detergents);
 Reg. (EC) n. 528/12 (Biocides BPR);
 Reg. (EC) n. 1223/2009 (Cosmetics);
 Dir. 06/08 ADR – RID - IMDG - IATA;
 Dir. 47/08 (Aerosols); Dir. 12/18 (Seveso III);
 Dir. 2008/98/CE and Reg. (EC) n.1357/2014 (Waste management)

- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **National regulations:**
- **Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**

H290 May be corrosive to metals.
 H302 Harmful if swallowed.
 H312 Harmful in contact with skin.
 H314 Causes severe skin burns and eye damage.
 H315 Causes skin irritation.
 H318 Causes serious eye damage.
 H332 Harmful if inhaled.
 H335 May cause respiratory irritation.
 H373 May cause damage to organs through prolonged or repeated exposure.

- **Department issuing SDS:**

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- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 DNEL: Derived No-Effect Level (REACH)
 PNEC: Predicted No-Effect Concentration (REACH)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPyB: very Persistent and very Bioaccumulative
 Met. Corr. 1: Corrosive to metals – Category 1
 Acute Tox. 4: Acute toxicity – Category 4
 Skin Corr. 1A: Skin corrosion/irritation – Category 1A
 Skin Corr. 1B: Skin corrosion/irritation – Category 1B
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Eye Dam. 1: Serious eye damage/eye irritation – Category 1
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
 STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

- *** Data compared to the previous version altered.**

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Annex: Exposure scenario

· Short title of the exposure scenario

For the finished product.

SDW 3 HARD WATER

· Sector of Use

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

· Product category PC35 Washing and cleaning products (including solvent based products)

· Description of the activities / processes covered in the Exposure Scenario See section 1 of the annex to the Safety Data Sheet.

· Conditions of use

· Duration and frequency 5 workdays/week.

· Physical parameters

· Physical state Fluid

· Concentration of the substance in the mixture The substance is main component.

· Used amount per time or activity According to directions for use.

· Other operational conditions

· Other operational conditions affecting environmental exposure No special measures required.

· Other operational conditions affecting worker exposure

Avoid contact with eyes.

Avoid contact with the skin.

Do not breathe gas/vapour/aerosol.

· Other operational conditions affecting consumer exposure No special measures required.

· Other operational conditions affecting consumer exposure during the use of the product Not applicable.

· Risk management measures

· Worker protection

· Organisational protective measures No special measures required.

· Technical protective measures Ensure that suitable extractors are available on processing machines

· Personal protective measures

Do not inhale gases / fumes / aerosols.

Avoid contact with the skin.

Avoid contact with the eyes.

Tightly sealed goggles

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protective gloves

Rubber gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Do not inhale dust / smoke / mist.

· Measures for consumer protection Ensure adequate labelling.

· Environmental protection measures

· Water Generally, prior to the introduction of wastewater into wastewater treatment plants a neutralisation is required.

· Disposal measures Ensure that waste is collected and contained.

· Disposal procedures Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· Waste type Partially emptied and uncleaned packaging

· Exposure estimation

· Consumer Not relevant for this Exposure Scenario.

· Guidance for downstream users No further relevant information available.